

## NUTRITIVE ALTERATIONS AND DEFORMITY OF FINGERS FROM PRESSURE ON NERVES IN THE AXILLA.

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(With one wood-cut.)

The subject of this communication sustained a fall about two years ago while walking, was picked up insensible, and carried to her home. She relates that when consciousness returned she suffered great pain in her left shoulder, arm, and fingers, and was incapable of moving the limb. She was confined to her house for five months, during all of which time she suffered much pain—principally about the shoulder. The hand, during this time, did not give her much pain, and she cannot recall that she ever suffered any “burning” pain in it. She came to the surgical clinic of the University of Maryland, in June, 1883, to obtain relief from severe pain in the left shoulder. The surgeon discovered an irreducible luxation of the head of the left humerus downward into the axilla, and the case was transferred to the clinic on nervous diseases. Upon examination I found that she could endure but little handling about the shoulder-joint, and that even moderate pressure above the clavicle caused considerable pain. Pain is almost constant about the shoulder. The left hand, especially the ring and little finger, feels numb, but she complains of no decided pain in it. Movements of the elbow-joint unimpaired; supination imperfect; movements of wrist stiff. Hand can be only partially closed because of stiffness in the last phalangeal joints. Slight appearance of deformity about the wrist, but there is no history of direct injury to it, nor does the most careful examination discover the signs of there having been a fracture of radius or ulna. The fingers stand apart as seen in the cut,

and can, by voluntary effort, be only partially and with difficulty approached to each other. Slight atrophy of muscles about shoulder and arm ; none in forearm. Muscles of hand but little atrophied.



As seen in the cut, all the fingers showed marked nutritive changes, the little and ring fingers most of all ; the thumb was not affected ; the little finger was deformed, its joints stiff ; the skin of the little and ring fingers was pale, glossy, and as if stretched. The same condition of the skin was observed in the last phalanx of the other fingers, but in a less degree. The nails of all the fingers were affected, showing lateral and longitudinal

curvature. That of the little finger was much distorted, and, as it were, crumpled.

Sensation was by no means lost in the fingers, but blunted, for tactile impressions, for heat and cold, and for the faradic current—especially in the little and ring. Stroking the ring or little finger, even lightly, caused a feeling of uneasiness that irresistibly impelled the patient to pluck the hand away.

The muscles of the forearm showed normal electric reaction. The interossei replied feebly to both the faradic and galvanic currents when strong. In the hypothenar region there was little or no reply to either current. Palpation along the course of the principal nerves of the arm revealed no enlargement of them, and elicited no pain.

The case seems to me worthy of notice, in view of the decided nutritive changes in a part in which there was from first to last so little pain, or paræsthesia. The burning pain, so very commonly the accompaniment of “glossy skin,” if it was present at any time, did not attract the attention of the patient sufficiently to be retained in her memory. The motor nerves, too, appear to have been but slightly affected.

No doubt the case must be classed as a “neuritis” excited by the pressure of the head of the humerus on the branches of the brachial plexus, but it is interesting to observe that it wants the classic features of neuritis as it is generally described. The deformity of the joints and trophic alterations of the skin crept on so slowly, and with such slight subjective symptoms in the part affected, that the patient can give no account of their commencement or progress. The case seems to me to speak in favor of trophic, apart from sensitive, or motor, fibres, and may also suggest the greater vulnerability of the trophic fibres under certain circumstances. Again, a point is suggested as to whether the trophic effects are caused by an irritation directly transmitted to the tissues, or whether the irritation is first sent centripetally and then reflected from nerve-centres to peripheral parts.